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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,290	02/28/2002	Toshio Kazama	AB-1215 US	3057

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EXAMINER

TSUKERMAN, LARISA Z

ART UNIT	PAPER NUMBER
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2833

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04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/070,290	Applicant(s) KAZAMA, TOSHIO	
	Examiner LARISA Z. TSUKERMAN	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6 and 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

An applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I) (1) and § 706.02(I)(2).

Claim 1, 2, 4, 6, 8, 9, 10 and 11-13 are rejected under 35 U.S.C. 103(a) as being obvious over Kazama (6043666) in view of Prival (3251121).

In regard to claims 1, 9 and 10, Kazama discloses a conductive contact member 3 for establishing a temporary electric contact by being applied under a resilient force, to an object 7 to be contacted, that includes solid solder 7a, the conductive contact member 3 comprising a compression coil spring 3 formed of a wire. Kazama lacks a layer of highly

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electrically conductive material resistant to solder deposition wherein the layer consists of gold containing a small amount of silver, containing no palladium, and is formed at least over a conductive contact part of the compression coil spring so that the conductive contact part of the conductive contact member may not be contaminated by deposition of solder from the object to be contacted. However, Prival teaches contact members 24, 16 and 26, 18 comprising layers 20, 22, 50 which consists of gold-silver alloy with portion of silver between 14/-1/6 of the weight of gold deposition. The alloy is found to have substantially ideal properties, that is, very low and stable resistance and no tendency to stick.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cover the contact element with a layer of gold-silver alloy, as taught by Prival, in order to lower the tendency to stick.

In regard to claim 2, Kazama modified by Prival includes a layer resistant to solder deposition formed by plating.

In regard to claim 4, Kazama modified by Prival discloses most of the claimed invention except for that silver is added to gold by 0.01 to 8%.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add silver to gold in such range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In regard to claim 6, Kazama modified by Prival discloses most of the claimed invention except for the conductive member comprised of steel. However, steel is a notoriously well known base material for contacts and terminals. It would have been obvious to one

having ordinary skill in the art at the time the invention was made to include the conductive member comprised of steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416 (CCPA 1960).

In regard to claim 8, Kazama modified by Prival discloses the contact member in the form of a compression spring having a contact part in a form of closely wound turns of a coil wire. Further, the solder resistant layer is formed over an outer surface of the closely wound turns of the coil wire.

In regard to claims 11-13, Kazama modified by Prival discloses most of the claimed invention except for silver added to gold between 0.01% and 5%. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add silver to gold in such range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 14 is rejected under 35 U.S.C. 103(a) as being obvious over Chang (5500605) in view of Prival (3251121).

In regard to claim 14, Chang discloses a conductive contact member 25 of a contact probe for establishing a temporary electric contact by being applied under a resilient force to an object to be contacted that includes solid solder 15, the conductive contact member 25 comprising a needle member 29. Chang lacks a layer of highly electrically conductive material resistant to solder deposition, wherein the layer consists of an alloy of gold added with silver, contains no palladium, and is formed at least over a

conductive contact part of the needle member so that the conductive contact part of the needle member may not be contaminated by deposition of solder from the object to be contacted. However, Prival teaches contact members (24,16 and 26, 18) comprising layers (20, 22, 50) which consist of gold-silver alloy with portion of silver between 14/-1/6 of the weight of gold deposition. The alloy is found to have substantially ideal properties, that is, very low and stable resistance and no tendency to stick. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cover the contact element 25 of Chung with a layer of gold-silver alloy, as taught by Prival, in order to lower any tendency to stick.

Claim 15 is rejected under 35 U.S.C. 103(a) as being obvious over Kato et al. (5727954) in view of Prival (3251121).

In regard to claim 15, Kato et al. disclose a conductive contact member 1 of a contact probe for establishing a temporary electric contact by being applied under a resilient force (at 7) to an object to be contacted that includes solid solder 16, the conductive contact member comprising a cylindrical rod member 1 (see Fig. 6). Kato et al. lack a layer of highly electrically conductive material resistant to solder deposition, wherein the layer consists of an alloy of gold added with silver, contains no palladium, and is formed at least over a conductive contact part of the rod member so that the conductive contact part of the rod member may not be contaminated by deposition of solder from the object to be contacted. However, Prival teaches a contact members (24,16 and 26, 18) comprising layers (20, 22, 50) which consist of gold-silver alloy with a portion of silver between 14/-1/6 of the weight of gold deposition. The alloy is found to have

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substantially ideal properties, that is, very low and stable resistance and no tendency to stick. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cover the contact element 1 of Kato et al. with layer of gold-silver alloy, as taught by Prival, in order to lower any tendency to stick.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARISA Z. TSUKERMAN whose telephone number is (571)272-2015. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee S Luebke can be reached on (571)-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LT, 04/23/2009

/renee s luebke/

Renee Luebke
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